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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/815,309

04/01/2004

James R. Lewis

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EXAMINER

DOBROWOLSKI, AGNES

ART UNIT

PAPER NUMBER

2626

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/815,309

Applicant(s)

LEWIS ET AL.

Examiner

Agnes Dobrowolski

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/1/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is responsive to Application No. 10/815309 filed on 4/1/2004, claims 1-19 are pending and have been examined.

Information Disclosure Statement

2. The information disclosure statement filed on 4/1/2004 has been considered.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Thong et al (Us Patent 6,490,553).

Claim 1. Van Thong teaches, a method of dynamically and automatically adjusting a speech output rate match an speech input rate, comprising the steps of:

receiving a speech input; **(Fig. 2 Speech input 17)**

computing a speech input rate from the speech input; and **(Fig.2 Recognizer & Speech rate calculation Unit 41; analyses the recorded speech data and calculates the average speech rate. This unit may operate in real time, or the averaged instantaneous rate values may be computed ahead of time during the preprocessing step. Col. 10, lines 50-55)**

dynamically adjusting the speech output rate to match the speech input rate.

(Fig. 2 Rate Adjusted Speech output 47; plays back recorded speech at a certain rate, this playback rate is able to match the input rate so that expressions sound the same coming in and exiting the system)

Claim 2. Van Thong teaches, the method of claim 1, wherein the method further comprises the step of determining a type of speech output. **(Fig. 1 Audio classifier 15)**

Claim 3. Van Thong teaches, the method of claim 2, wherein the method further comprises the step of adjusting a rate of text-to-speech synthesis to match the speech input rate if the type of speech output is text-to-speech. **(Fig.1; The next module, the speech control module 19, controls the rate of speech depending on how fast the text is spoken and/or how fast the operator 53 types. Col 3 lines 55-54;**

Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)

Claim 4. Van Thong teaches, the method of claim 2, wherein the method further comprises the step of counting alternate text available from a recorded output and determining an audio file length to compute a default output rate **(Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)** which is used to adjust a recorded output rate **(Fig. 2 rate adjusted speech input 47)** to match the input speech rate when the type of speech is recorded **(Fig. 2 input speech 17)** and alternate text is available. **(The desired target speech rate 37 may be a “predefined value” or depend on external synchronization, here the keyboard input i.e. text available (i.e. real time transcribed text) 49. Col. 5 lines 1-3)**

Claim 5. Van Thong teaches, the method of claim 4, wherein the method further comprises the step of obtaining an output word count from a transcription of a recorded speech output and determining an audio file length to compute a default output rate **(Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)** which is used to adjust a recorded output rate **(Fig. 2 rate adjusted speech input 47)** to match the input speech rate when the type of speech is recorded **(Fig. 2 input speech 17)** and alternate text is unavailable **(The desired target speech rate 37 may be a “predefined value” i.e. text not available or depend on external synchronization, here the keyboard input (i.e. real time transcribed text) 49. Col. 5 lines 1-3)**

Claim 6. Van Thong teaches, the method of claim 1, wherein the step of compute the speech input rate comprises the step of computing a running average of the rates computed for the last n utterances of the speech input. **(Fig.2 Recognizer & Speech rate calculation Unit 41, analyses the recorded speech data and calculates the average speech rate. This unit may operate in real time, or the averaged instantaneous rate values may be computed ahead of time during the preprocessing step. Col. 10, lines 50-55)**

Claim 7. Van Thong teaches, the method of claim 1, wherein the method further comprises the step of feeding back an estimate of the speech input rate **(Fig. 2 Speech rate calculation Unit element 41)** to a speech production mechanism to adjust the speech output rate. **(Fig. 2 rate adjusted speech output)**

Claim 8. Van Thong teaches, a system for dynamically and automatically adjusting an speech output rate to match an speech input rate, comprises: a memory; **(Fig. 6 Laptop and memory storage devices)** and a processor programmed to receives a speech input; **(Fig. 2 Speech input 17)**

computes a speech input rate from the speech input; and **(Fig.2 Recognizer & Speech rate calculation Unit 41; analyses the recorded speech data and calculates the average speech rate. This unit may operate in real time, or the averaged instantaneous rate values may be computed ahead of time during the preprocessing step. Col. 10, lines 50-55)**

dynamically adjusts the speech output rate to match the speech input rate. **(Fig. 2 Rate Adjusted Speech output 47; plays back recorded speech at a certain rate, this playback rate is able to match the input rate so that expressions sound the same coming in and exiting the system)**

Claim 9. Van Thong teaches, the system of claim 8, wherein the processor is further programmed to determine a type of speech output. **(Fig. 1 Audio classifier 15)**

Claim 10. Van Thong teaches, the system of claim 9, wherein the processor is further programmed to adjust a rate of text-to-speech synthesis to match the speech input rate if the type of speech output is text-to-speech. **(Fig.1; The next module, the speech control module 19, controls the rate of speech depending on how fast the text is spoken and/or how fast the operator 53 types. Col 3 lines 55-54;**
Alternatively, the speech playback rate may depend on the external

synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)

Claim 11. Van Thong teaches, the system of claim 9, wherein the processor is further programmed to count alternate text available from a recorded output and determine an audio file length to compute a default output rate **(Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)** which is used to adjust a recorded output rate **(Fig. 2 rate adjusted speech input 47)** to match the input speech rate when the type of speech is recorded **(Fig. 2 input speech 17)** and alternate text is available. **(The desired target speech rate 37 may be a “predefined value” or depend on external synchronization, here the keyboard input i.e. text available (i.e. real time transcribed text) 49. Col. 5 lines 1-3)**

Claim 12. Van Thong teaches, the system of claim 9, wherein the processor is further programmed to obtain an output word count from a transcription of a recorded Speech output and determine an audio file length to compute a default output rate **(Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)** which is used to adjust a recorded output rate **(Fig. 2 rate adjusted speech input 47)** to match the input speech rate when the type of speech is recorded **(Fig. 2 input speech 17)** and alternate text is unavailable **(The desired target speech rate 37 may be a “predefined value” i.e. text not available or**

depend on external synchronization, here the keyboard input (i.e. real time transcribed text) 49. Col. 5 lines 1-3)

Claim 13. Van Thong teaches, the system of claim 8, wherein the processor is further programmed to compute a running average of the rates computed for the last n utterances of the speech input when computing the speech input rate. **(Fig.2 Recognizer & Speech rate calculation Unit 41, analyses the recorded speech data and calculates the average speech rate. This unit may operate in real time, or the averaged instantaneous rate values may be computed ahead of time during the preprocessing step. Col. 10, lines 50-55)**

Claim 14. Van Thong teaches, the system of claim 8, wherein the processor is further programmed to feed back an estimate of the speech input rate **(Fig. 2 Speech rate calculation Unit element 41)** to a speech production mechanism to adjust the speech output rate. **(Fig. 2 rate adjusted speech output)**

Claim 15. Van Thong teaches, a machine-readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform**(Fig. 6 Laptop and memory storage devices)** the steps of receiving a speech input; **(Fig. 2 Speech input 17)**

computing a speech input rate from the speech input; and **(Fig.2 Recognizer & Speech rate calculation Unit 41; analyses the recorded speech data and calculates the average speech rate. This unit may operate in real time, or the averaged instantaneous rate values may be computed ahead of time during the preprocessing step. Col. 10, lines 50-55)**

dynamically adjusting the speech output rate to match the speech input rate.

(Fig. 2 Rate Adjusted Speech output 47; plays back recorded speech at a certain rate, this playback rate is able to match the input rate so that expressions sound the same coming in and exiting the system)

Claim 16. Van Thong teaches, the machine-readable storage of claim 15, wherein the machine-readable storage is further programmed to determine a type of speech output. **(Fig. 1 Audio classifier 15)**

Claim 17. Van Thong teaches, the machine-readable storage of claim 16, wherein the machine-readable storage is further programmed to adjust a rate of text-to-speech synthesis to match the speech input rate if the type of speech output is text-to-speech. **(Fig.1; The next module, the speech control module 19, controls the rate of speech depending on how fast the text is spoken and/or how fast the operator 53 types. Col 3 lines 55-54; Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)**

Claim 18. Van Thong teaches, the machine-readable storage of claim 16, wherein the machine-readable storage is further programmed to count alternate text available from a recorded output and of determine an audio file length to compute a default output rate **(Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)** which is used to adjust a recorded output rate **(Fig. 2 rate adjusted speech input 47)** to match the input speech

rate when the type of speech is recorded (**Fig. 2 input speech 17**) and alternate text is available. **(The desired target speech rate 37 may be a “predefined value” or depend on external synchronization, here the keyboard input *i.e. text available* (i.e. real time transcribed text) 49. Col. 5 lines 1-3)**

Claim 19. Van Thong teaches, the machine-readable storage of claim 16, wherein the machine-readable storage is further programmed to obtain an output word count from a transcription of a recorded speech output and determine an audio file length to compute a default output rate **(Alternatively, the speech playback rate may depend on the external synchronization source such as the text-input of an operator transcribing the recorded speech. Col 12 lines 21 –23)** which is used to adjust a recorded output rate (**Fig. 2 rate adjusted speech input 47**) to match the input speech rate when the type of speech is recorded (**Fig. 2 input speech 17**) and alternate text is unavailable **(The desired target speech rate 37 may be a “predefined value” *i.e. text not available* or depend on external synchronization, here the keyboard input (i.e. real time transcribed text) 49. Col. 5 lines 1-3)**

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Amir et al. (US Pub 2002/0116188)


6. Heckerman et al. (US Patent 6,260,011)
7. Zhang et al. (US Patent 6,185,329)
8. Kirby et al. (US Patent 6,226,615)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agnes Dobrowolski whose telephone number is 571-270-1453. The examiner can normally be reached on M-F 9AM- 4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AD



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PRIMARY EXAMINER